

STATEMENT OF BASIS

as required by LAC 33:IX.3109, for draft **Louisiana Pollutant Discharge Elimination System Permit No. LA0038644; AI 43993; PER20080001** to discharge to waters of the **State of Louisiana** as per LAC 33:IX.2311.

The **permitting authority** for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

- I. **THE APPLICANT IS:** Town of Wisner
 Wisner Sewer Treatment Plant
 P.O. Box 290
 Wisner, LA 71378

- II. **PREPARED BY:** Rachel Davis

- DATE PREPARED:** July 7, 2008

- III. **PERMIT ACTION:** reissue LPDES permit LA0038644, AI 43993; PER20080001

 LPDES application received: May 19, 2008

 LPDES permit issued: November 1, 2003
 LPDES permit expired: October 31, 2008

IV. **FACILITY INFORMATION:**

- A. The application is for the discharge of treated sanitary wastewater from a publicly owned treatment works serving the Town of Wisner.

- B. The permit application does not indicate the receipt of industrial wastewater.

- C. The facility is located southeast of Wisner at the end of Mercer Street in Wisner, Franklin Parish.

- D. The treatment facility consists of an oxidation pond with a rock filter and chlorination for disinfection.

E. Outfall 001

Discharge Location: Latitude 31° 58' 33" North
 Longitude 91° 39' 0" West

Description: treated sanitary wastewater

Design Capacity: 0.499 MGD

Type of Flow Measurement which the facility is currently using:
 Combination Totalizing Meter / Continuous Recorder

V. **RECEIVING WATERS:**

The discharge is into an unnamed ditch, thence into Deer Creek, thence into Boeuf River in segment 081003 of the Ouachita River Basin. This segment is not listed on the 303(d) list of impaired waterbodies.

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The designated uses and degree of support for Segment 081003 of the Ouachita River Basin are as indicated in the table below^{1/}:

Overall Degree of Support for Segment 081003	Degree of Support of Each Use						
	Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
	N/A	Full	N/A	N/A	N/A	N/A	N/A

^{1/}The designated uses and degree of support for Segment 081003 of the Ouachita River Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2006 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 081003 of the Ouachita River Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U. S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated October 27, 2007 from Boggs (FWS) to Brown (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

VII. HISTORIC SITES:

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

VIII. PUBLIC NOTICE:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

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For additional information, contact:

Ms. Rachel Davis
 Water Permits Division
 Department of Environmental Quality
 Office of Environmental Services
 P. O. Box 4313
 Baton Rouge, Louisiana 70821-4313

IX. PROPOSED PERMIT LIMITS:**Final Effluent Limits:**

Subsegment 081003, Deer Creek- Headwaters to confluence with Boeuf River , is not listed on LDEQ's Final 2006 303(d) List as impaired. However, subsegment 081003 was previously listed as impaired for dissolved oxygen, for which TMDL's have been developed. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional TMDL's and/or water quality studies. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as necessary to achieve compliance with water quality standards.

Boeuf River Watershed TMDL for Biochemical-Oxygen demanding substances and Nutrients:

There are only 4 discharges listed in the LDEQ permit tracking system. These facilities were evaluated based on the volume of their discharge, their location with respect to the listed waterbody, any water quality data which demonstrated their impact or lack of impact, whether or not the NPS contribution included any small facilities and best professional judgement. Only the Town of Rayville was considered to have any ability to impact the target reaches and it was included in the model. Uncalibrated models were performed for the receiving streams for the Village of Bonita and Kilbourne. The results of the uncalibrated model showed that neither discharger had an impact on the Boeuf River.

OUTFALL 001

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
CBOD ₅	42	10 mg/l	15 mg/l	Limits are set in accordance with the Deer Creek Intensive Survey, Town of Wisner ATFWQR, and the EPA-approved TMDL (May, 1997)
TSS	62	15 mg/l	23 mg/l	Since there is no numeric water quality criterion for TSS, and in accordance with the current Water Quality Management Plan, the TSS effluent limitations shall be based on a case-by-case evaluation of the treatment technology being utilized at a facility. Therefore, a

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Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
				Technology Based Limit has been established through Best Professional Judgement for the type of treatment technology utilized at this facility.
Ammonia-Nitrogen	21	5 mg/l	10 mg/l	Limits are set in accordance with the Deer Creek Intensive Survey, Town of Wisner ATFWQR, and the EPA-approved TMDL (May, 1997)
Dissolved Oxygen**		5.0 mg/l	N/A	Limits are set in accordance with the Deer Creek Intensive Survey, Town of Wisner ATFWQR, and the EPA-approved TMDL (May, 1997)

*Concentration limits are used in accordance with LAC 33:IX.2709.F.1.b which states that mass limitations are not necessary when applicable standards and limitations are expressed in other units of measurement. LAC 33:IX.709.B references LAC 33:IX.711 which express BOD₅ and TSS in terms of concentration.

**This Dissolved Oxygen limit is the lowest allowable average of daily discharges over a calendar month. When monitoring is conducted, the Dissolved Oxygen shall be analyzed immediately, as per 40 CFR 136.3.

Other Effluent Limitations:**1) Fecal Coliform**

The discharge from this facility is into a water body which has a designated use of Secondary Contact Recreation. According to LAC 33:IX.1113.C.5.b.ii, the fecal coliform standards for this water body are 1,000/100 ml and 2,000/100 ml. Therefore, the limits of 1,000/100 ml (Monthly Average) and 2,000/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) pH

According to LAC 33:IX.3705.A.1., POTW's must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C., the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

X. PREVIOUS PERMITS:

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LPDES Permit No. LA0038644: Issued: November 1, 2003

Expired: October 31, 2008

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Daily Avg.	Daily Max.	Measurement Frequency	Sample Type
Flow	Report	Report	Continuous	Recorder
CBOD ₅	10 mg/l	15 mg/l	2/month	Grab
TSS	15 mg/l	23 mg/l	2/month	Grab
Ammonia-Nitrogen	5 mg/l	10 mg/l	2/month	Grab
Fecal Coliform Colonies	1,000	2,000	2/month	Grab

XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:

A) Inspections

A review of the files indicates the following inspections were performed during the period beginning **March 2003** and ending **March 2008** for this facility.

Date: June 17, 2007

Inspector: Jeremy Moore

Findings and/or Violations:

1. Inspection was conducted due to a complaint that stated that a drainage ditch was not draining properly
2. There was evidence that there had been an overflow of sewage around a manhole that had not been reported to DEQ

C) DMR Review

A review of the discharge monitoring reports for the period beginning **March 2006** through **March 2008** has revealed the following violations:

Parameter	Outfall	Period of Excursion	Permit Limit	Reported Quantity
CBOD (monthly)	001	March 2006	10 mg/l	13.36 mg/l
CBOD (weekly)	001	March 2006	15 mg/l	16.5 mg/l
TSS (monthly)	001	March 2006	15 mg/l	21.14 mg/l
TSS (weekly)	001	March 2006	23 mg/l	30.90 mg/l
CBOD (monthly)	001	April 2006	10 mg/l	19.22 mg/l
CBOD (weekly)	001	April 2006	15 mg/l	23.5 mg/l
Ammonia (monthly)	001	April 2006	5 mg/l	8.46 mg/l
Ammonia (weekly)	001	April 2006	10 mg/l	10.08 mg/l
CBOD (monthly)	001	June 2006	10 mg/l	10.61 mg/l
CBOD (monthly)	001	September 2006	10 mg/l	10.17 mg/l
Ammonia (monthly)	001	November 2006	5 mg/l	10.69 mg/l
Ammonia (weekly)	001	November 2006	10 mg/l	13.44 mg/l
TSS (monthly)	001	April 2007	15 mg/l	19.98 mg/l
TSS (weekly)	001	April 2007	23 mg/l	37.10 mg/l
Fecal (monthly)	001	April 2007	1,000	2,005
Fecal (weekly)	001	April 2007	2,000	4,000
pH	001	June 2007	6	5.60
DO	001	October 2007	5 mg/l	4.52 mg/l

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XII. ADDITIONAL INFORMATION:

The Louisiana Department of Environmental Quality (LDEQ) reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional water quality studies and/or TMDL's. The LDEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as requested by the permittee and/or as necessary to achieve compliance with water quality standards. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

In accordance with LAC 33:IX.2903., this permit may be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitations issued or approved under sections 301(b)(2)(c) and (D); 304(b)(2); and 307(a)(2) of the Clean Water Act, if the effluent standard or limitations so issued or approved:

- a) Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
- b) Controls any pollutant not limited in the permit; or
- c) Requires reassessment due to change in 303(d) status of waterbody; or
- d) Incorporates the results of any total maximum daily load allocation, which may be approved for the receiving water body.

Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity of 0.499 MGD.

Effluent loadings are calculated using the following example:

$$\text{BOD: } 8.34 \text{ lb/gal} \times 0.499 \text{ MGD} \times 10 \text{ mg/l} = 42 \text{ lb/day}$$

At present, the **Monitoring Requirements, Sample Types, and Frequency of Sampling** as shown in the permit are standard for facilities of flows between 0.10 and 0.50 MGD.

Effluent CharacteristicsMonitoring Requirements

	<u>Measurement</u>	<u>Sample</u>
	<u>Frequency</u>	<u>Type</u>
Flow	Continuous	Recorder
CBOD ₅	2/month	Grab
Total Suspended Solids	2/month	Grab
Ammonia-Nitrogen	2/month	Grab
Dissolved Oxygen	2/month	Grab
Fecal Coliform Bacteria	2/month	Grab
pH	2/month	Grab

Pretreatment Requirements

Based upon consultation with LDEQ pretreatment personnel, it is recommended that LDEQ Option 1 Pretreatment Language be included in LPDES Permit LA0038644.

This language is established for municipalities that do not have either an approved or required Pretreatment program. This recommendation is in accordance with 40 CFR Part 403 regulations, the General Pretreatment Regulations for Existing and New Sources of Pollution contained in LAC Title 33, Part IX, Chapter 61 and the Best Professional Judgement (BPJ) of the reviewer.

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Pollution Prevention Requirements

The permittee shall institute or continue programs directed towards pollution prevention. The permittee shall institute or continue programs to improve the operating efficiency and extend the useful life of the facility. The permittee will complete an annual Environmental Audit Report **each year** for the life of this permit according to the schedule below. The permittee will accomplish this requirement by completing an Environmental Audit Form which has been attached to the permit. All other requirements of the Municipal Wastewater Pollution Prevention Program are contained in Part II of the permit.

The audit evaluation period is as follows:

Audit Period Begins	Audit Period Ends	Audit Report Completion Date
Effective Date of Permit	12 Months from Audit Period Beginning Date	3 Months from Audit Period Ending Date

XIII. TENTATIVE DETERMINATION:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in this Statement of Basis.

XIV. REFERENCES:

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 1998.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards," Louisiana Department of Environmental Quality, 2004.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program," Louisiana Department of Environmental Quality, 2004.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, Town of Wisner, Wisner Sewer Treatment Plant, May 19, 2008.